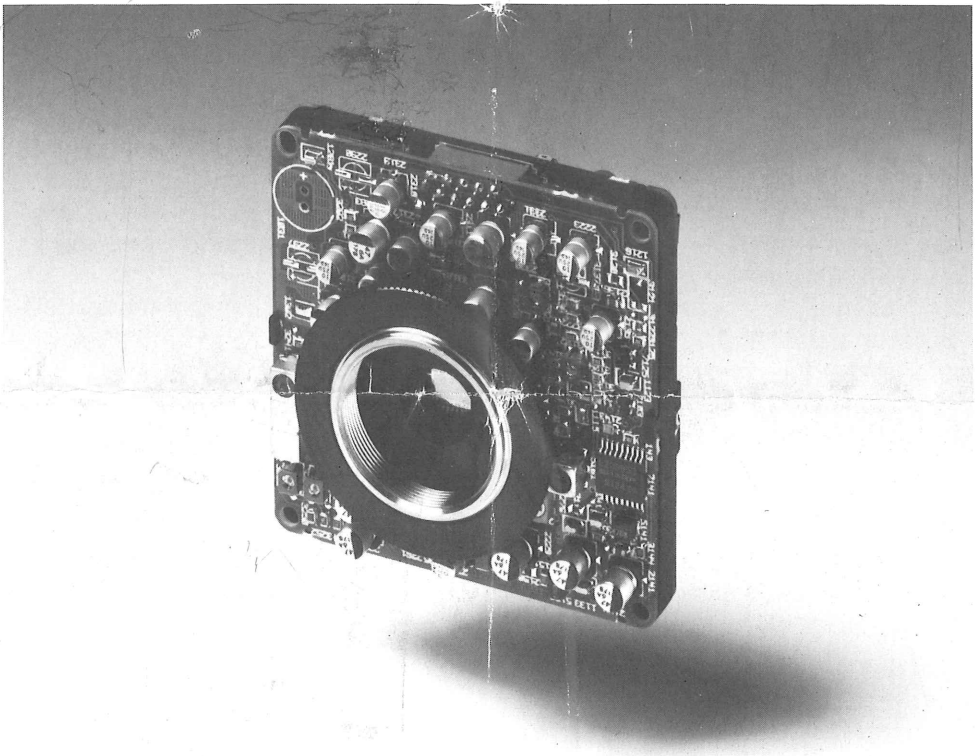
Philips Consumer Electronics

MONOCHROME IMAGING MODULE VCM3150



INSTRUCTIONS FOR USE

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Please read these instructions carefully before trying to put this device into operation.
If in doubt call for a qualified Philips representative.

CONNECTIONS

Power supply

The module must be powered by a separate, galvanically isolated, AC or DC power supply unit.
The AC supply voltage may vary from 12V to 28V (50 Hz for CCIR, 60Hz for EIA, in view of linelock).
The DC supply voltage may vary from 10V to 39V.
The same connection terminals are used for AC as well as for DC operation.
The power supply is connected to the module via a three pole screw block (see fig. 1).
Connect the power leads to (D) and (E). Although the module operates polarity independent we advise in case of DC supply to connect (D) to the negative (-) and (E) to the positive (+) voltage.
Connection (F) is a safety ground connection, provided to connect the module to ground potential. The maximum voltage between the safety ground (F) and either one of the power supply inputs (D) or (E) may not exceed 50 Volt.
The module itself is galvanically isolated from the power supply which prevents susceptibility to ground loops in systems with more than one camera.

Video output

A standard VBS video signal is available at the cinch connector (C), figure 1.
For the connection cable the use of a 75 Ohm coaxial cable is recommended, for example RG-59/U.

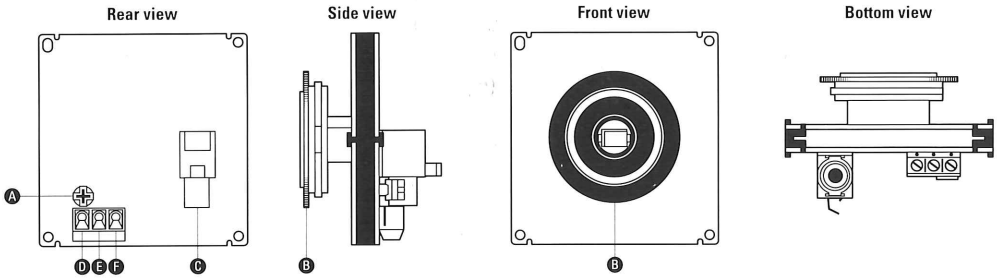

fig. 1

SYNCHRONIZATION

The module can be used single or as a part of a larger system. The module generates its own timing and synchronization pulses.
When more video modules share the same video equipment synchronizing of the modules is possible if the modules are powered by an AC power supply. If AC powered the modules are automatically vertically phase-locked to the local line frequency (**linelock**). By means of the Vphase potentiometer (A), figure 1, a **phase adjustment** of the linelock over 240 degrees is possible. Locking the modules in this way makes it possible to switch between cameras without rolling display or VCR lock problems.

THE LENS

The module is equipped with a standard CS lens mount. Fixed iris and manual iris lenses with this standard CS-lens mount can be mounted directly to the module. For C-mount lenses a C-to CS-mount adapter ring must be used.
When using a lens with manual iris adjustment in principle the largest aperture should be chosen.
Automatic iris lenses cannot be used.

Focus adjustment

The lens mount adjustment ring has been pre-adjusted in the factory to standard CS-mount back-focus distance. Re-adjustment of the back-focus distance may however be necessary if the back-focus distance for a particular lens differs slightly from the standard.
The procedure for back-focus adjustment:

* Screw the lens in the lens mount ring of the module.
* Set the focusing ring of the lens to infinity.
  (This does not apply of course in case of a fixed focus lens)
* Connect the module to the power supply and the monitor and switch on.
* Aim the camera at an object which is at least 15 metres (45 feet) away.
* Loosen the back-focus locking ring (B), figure 1, at the front of the module by turning it anti-clockwise.
* Turn the CS-mount ring with lens until the video picture is sharp.
  This adjustment is most accurate with the iris fully open.
* Tighten the back-focus locking ring while keeping the lens in position.

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